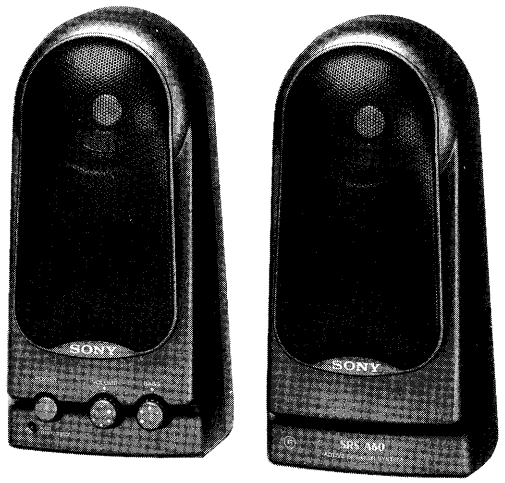
SRS-A60

SERVICE MANUAL



US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model

SPECIFICATIONS

Amplifier section

Power output
4 W + 4 W

Input impedance
1.7 kilohms (at 1 kHz)

Speaker section

System
Full-range, 65 mm ($2\,^5/_8$ in.) dia., bass reflex enclosure

Nominal impedance
4 ohms (OFF/DIRECT)

Rated input power
4 W (OFF/DIRECT)

General

Power requirement
DC 12 V: eight R6 (size AA) batteries (left speaker only)
DC 9V: supplied AC power adaptor

Battery life (at 5 mW + 5 mW output)
Approx. 15 hours with Sony batteries SUM-3 (NS),
Approx. 30 hours with Sony alkaline batteries AM3 (N)

Dimensions
Approx. 117 x 227x 130 mm (w/h/d) ($4\,^5/_8$ x 9 x $5\,^1/_8$ in.)

Mass
Left speaker: Approx. 630 g (1 lb. 6 oz.), Right speaker: Approx. 530 g (1 lb. 3 oz.) not incl. batteries

Supplied accessory
AC power adaptor (1)
AC plug adaptor (E model only)

Design and specifications are subject to change without notice.

Note

This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

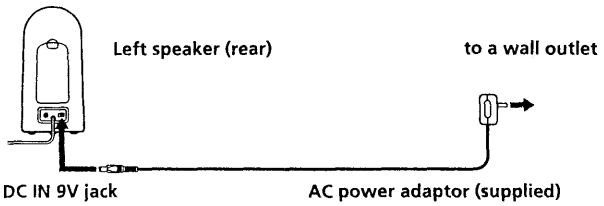
ACTIVE SPEAKER SYSTEM

SONY®

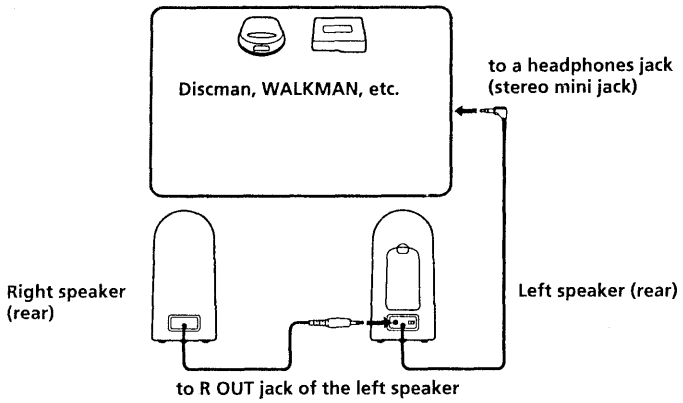
SECTION 1
GENERAL

This section is extracted from instruction manual.

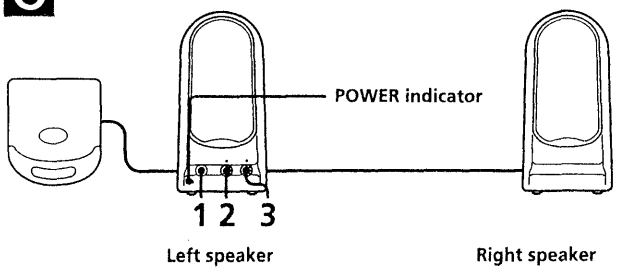
A



B


Discman, WALKMAN, etc.
to a headphones jack (stereo mini jack)
Right speaker (rear)
Left speaker (rear)
to R OUT jack of the left speaker

C



Power Sources (See fig. A)

Using on house current

When the AC power adaptor is connected to the system, internal batteries are automatically disconnected.

For the users in countries other than the United Kingdom, European countries and Canada

The supplied AC power adaptor operates on either 110, 120, 220 or 240 V. Before connecting the adaptor to a wall outlet, set the voltage selector on the adaptor correctly to your local power line voltage, using a screwdriver.

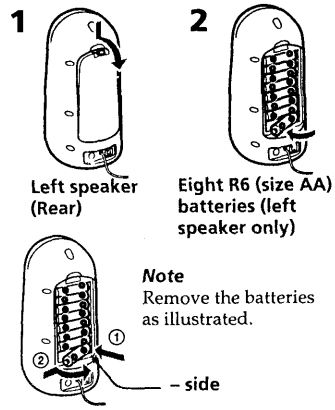
For the customers of the model supplied with an AC plug adaptor

If the plug of the AC power adaptor does not match with your wall outlet, use the supplied AC plug adaptor.

Note on the AC power adaptor

Use only the AC power adaptor (supplied). Do not use any other AC power adaptor.

Battery installation



Battery Replacement

When the batteries are weak, the POWER indicator will start flickering and become faint, or the playback sound will be distorted or unstable. In such a case, replace all the batteries with new ones. For battery life, see "Specifications".

Connections (See fig. B)

Connect the left speaker to the source equipment.

When the system is connected to a monaural jack of a radio, etc., the sound may only come through the left speaker. In such a case, use the optional Sony plug adaptor PC-236MS. The sound will come through both speakers.

To connect to a stereo phone-type headphones jack

Use the optional PC-234S plug adaptor or RK-G138 connecting cord.

How to Use (See fig. C)

Listening to the sound through the built-in amplifier

1 **Press the POWER switch (⏍ ON).**
The POWER indicator lights up.

2 **Adjust the VOLUME control.**

3 **Turn the BASS control clockwise to reinforce the bass.**

After listening, press the POWER switch (⏍ OFF/DIRECT).
The POWER indicator goes off.

Listening to the sound without the built-in amplifier

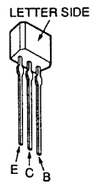
Set the POWER switch (⏍ OFF/DIRECT). In this case, the VOLUME control and the BASS control do not operate. Adjust the volume with the connected equipment.

SECTION 2
DIAGRAMS

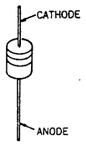
2-1. PRINTED WIRING BOARDS

• SEMICONDUCTOR LEAD LAYOUTS

2SA1175-HFE
2SC2785-HFE



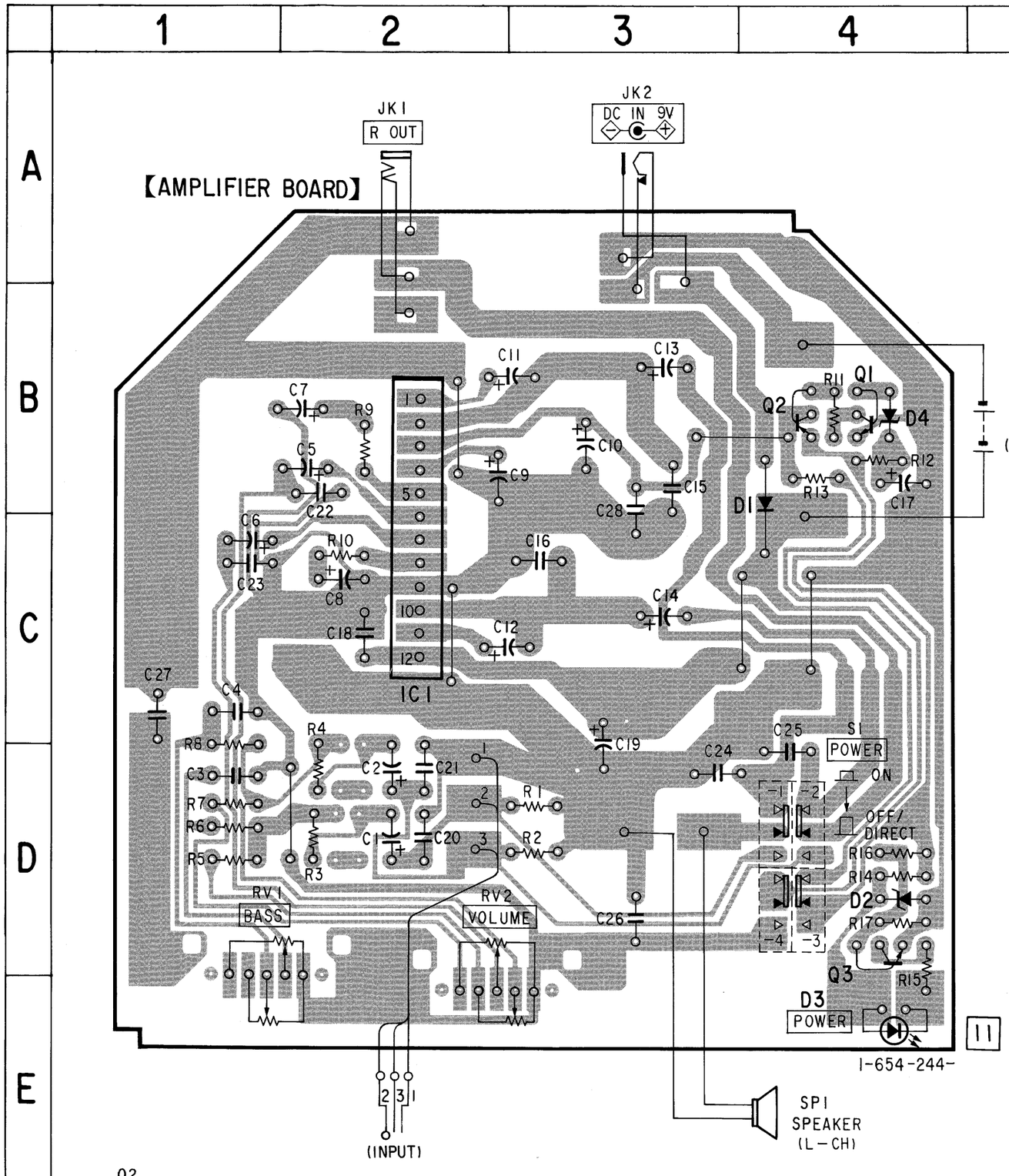
RD3.3ES-B2
RD6.2ES-B1
11ES2



TLR226

• SEMICONDUCTOR LOCATION

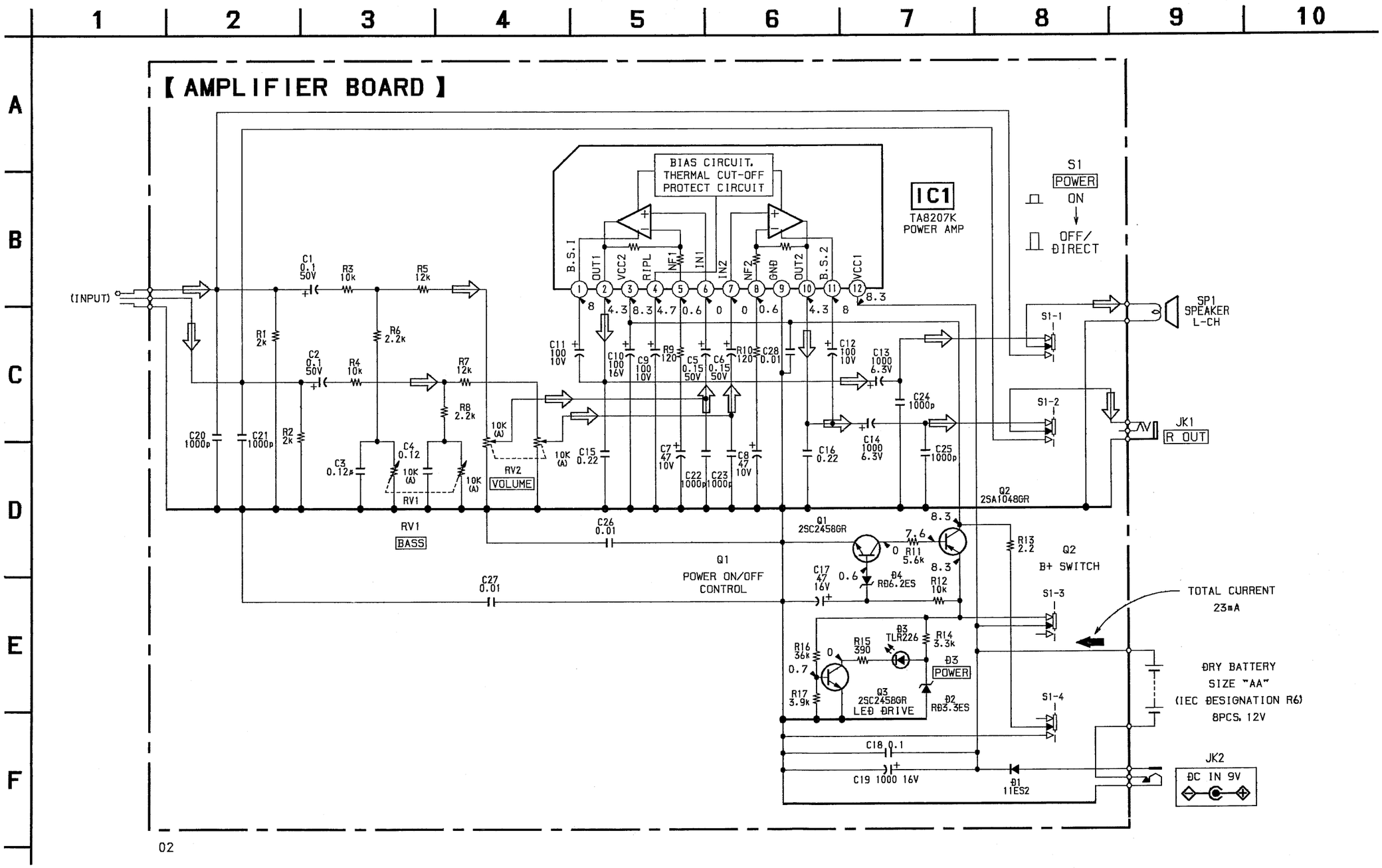
Ref. No.	Location
D1	B - 4
D2	D - 4
D3	E - 4
D4	B - 4
IC1	C - 2
Q1	B - 4
Q2	B - 4
Q3	D - 4



Note:

- ○— : parts extracted from the component side.
- ▒▒▒ : Pattern on the side which is seen.

2-2. SCHEMATIC DIAGRAM



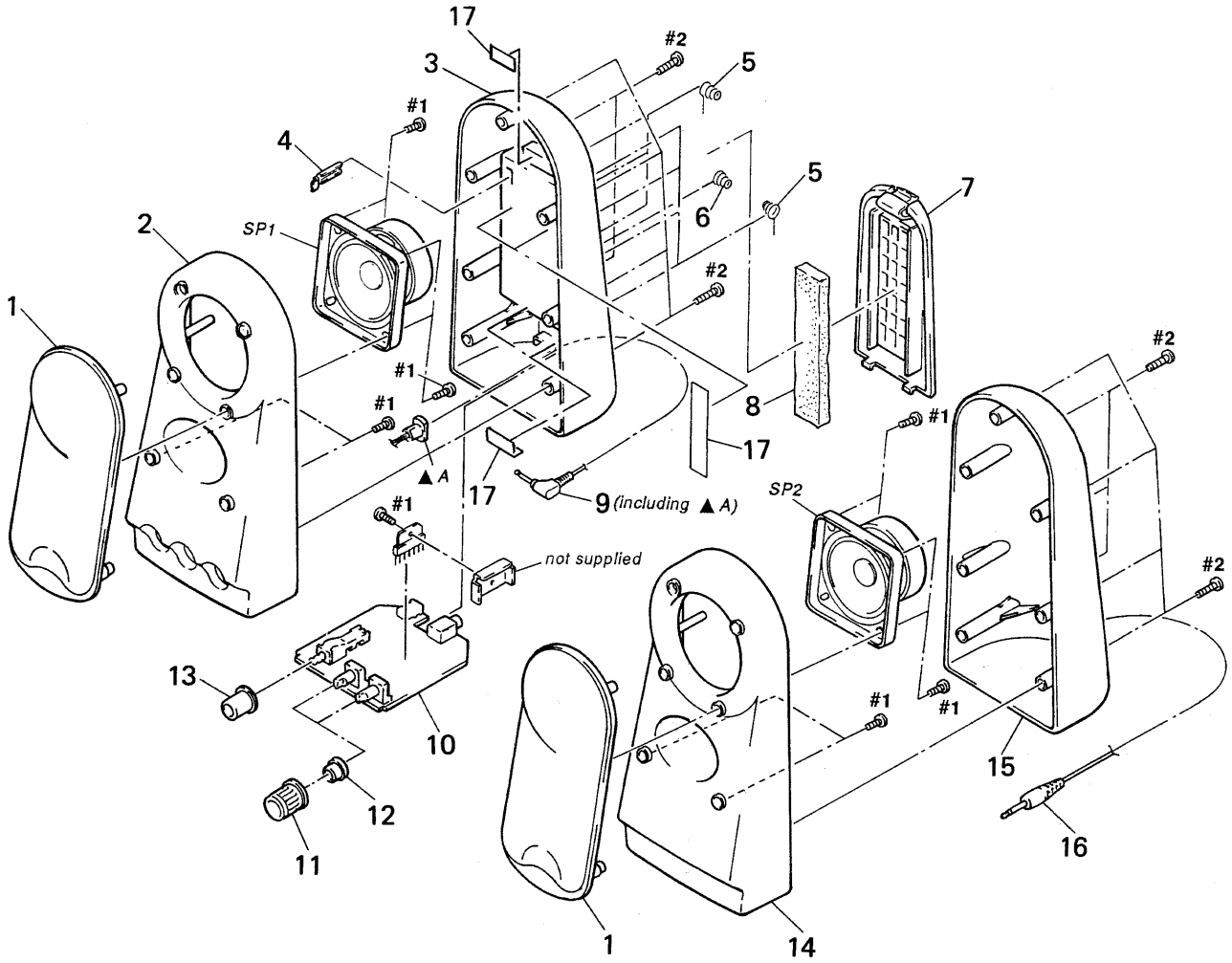
Note :

- All capacitors are in μ F unless otherwise noted. pF: μ μ F 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- B+ : B+ Line
- Power voltage is dc 9V and fed with regulated dc power supply from external power voltage jack.(JK2)
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- Voltages are taken with a VOM (Input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Signal path.

SECTION 3
EXPLODED VIEW

NOTE :

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Accessories and packing materials are given in the last of this parts list.



Ref. No.	Part No.	Description	Remark
1	X-4945-265-1	GRILLE ASSY	
2	4-969-585-01	CABINET (L), FRONT	
3	4-969-587-01	CABINET (L), REAR	
4	2-143-931-01	TERMINAL, PLUS BATTERY	
5	4-967-264-01	SPRING, BATTERY COIL	
6	3-895-784-01	SPRING	
7	4-969-589-01	LID, BATTERY CASE	
8	9-911-815-03	CUSHION (BATTERY CASE LID)	
9	1-559-892-11	CORD (WITH PLUG) (INPUT)	
* 10	A-4542-258-A	AMPLIFIER BOARD, COMPLETE	
11	4-969-593-01	KNOB (VOLUME)	

Ref. No.	Part No.	Description	Remark
12	4-969-872-01	SPACER (VOLUME)	
13	4-969-592-01	BUTTON (POWER)	
14	4-969-586-01	CABINET (R), FRONT	
15	4-969-588-01	CABINET (R), REAR	
16	1-769-080-11	CORD (WITH PLUG) (R OUT)	
17	3-831-441-11	CUSHION	
SP1	1-504-588-11	SPEAKER (L-CH)	
SP2	1-504-588-11	SPEAKER (R-CH)	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#2	7-685-649-79	SCREW +BVTP 3X14 TYPE2 IT-3	

SECTION 4
ELECTRICAL PARTS LIST

AMPLIFIER

NOTE :
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE : Metal oxide-film resistor
  F : nonflammable
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : μ , for example :
  uA.... : μ A.... , uPA.... : μ PA....
  uPB.... : μ PB.... , uPC.... : μ PC....
  uPD.... : μ PD....
- CAPACITORS
  uF : μ F
- COILS
  uH : μ H

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref.No.	Part No.	Description			Remark
*	A-4542-258-A	AMPLIFIER BOARD, COMPLETE			
		**********			
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S			
		< CAPACITOR >			
C1	1-124-250-11	ELECT	0.15MF	20%	50V
C2	1-124-250-11	ELECT	0.15MF	20%	50V
C3	1-130-496-00	MYLAR	0.12uF	5%	50V
C4	1-130-496-00	MYLAR	0.12uF	5%	50V
C5	1-124-250-11	ELECT	0.15MF	20%	50V
C6	1-124-250-11	ELECT	0.15MF	20%	50V
C7	1-126-947-11	ELECT	47MF	20%	10V
C8	1-126-947-11	ELECT	47MF	20%	10V
C9	1-126-933-11	ELECT	100MF	20%	10V
C10	1-126-933-11	ELECT	100MF	20%	16V
C11	1-126-933-11	ELECT	100MF	20%	10V
C12	1-126-933-11	ELECT	100MF	20%	10V
C13	1-126-916-11	ELECT	1000MF	20%	6.3V
C14	1-126-916-11	ELECT	1000MF	20%	6.3V
C15	1-130-499-00	MYLAR	0.22uF	5%	50V
C16	1-130-499-00	MYLAR	0.22uF	5%	50V
C17	1-124-126-00	ELECT	47MF	20%	16V
C18	1-162-851-11	CERAMIC	0.1MF		16V
C19	1-126-952-11	ELECT	1000MF	20%	16V
C20	1-162-294-31	CERAMIC	0.001uF	10%	50V
C21	1-162-294-31	CERAMIC	0.001uF	10%	50V
C22	1-162-294-31	CERAMIC	0.001uF	10%	50V
C23	1-162-294-31	CERAMIC	0.001uF	10%	50V
C24	1-162-294-31	CERAMIC	0.001uF	10%	50V
C25	1-162-294-31	CERAMIC	0.001uF	10%	50V
C26	1-162-306-11	CERAMIC	0.01MF	20%	16V
C27	1-162-306-11	CERAMIC	0.01MF	20%	16V
C28	1-162-306-11	CERAMIC	0.01MF	20%	16V

Ref.No.	Part No.	Description			Remark
		< DIODE >			
D1	8-719-200-82	DIODE 11ES2			
D2	8-719-109-66	DIODE RD3.3ES-B2			
D3	8-719-812-26	LED TLR226(POWER)			
D4	8-719-109-92	DIODE RD6.2ES-B1			
		< IC >			
IC1	8-759-230-13	IC TA8207K			
		< JACK >			
JK1	1-507-777-00	JACK, SMALL TYPE(R OUT)			
JK2	1-569-966-11	JACKE, DC(DC IN 9V)			
		< TRANSISTOR >			
Q1	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q2	8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q3	8-729-119-78	TRANSISTOR 2SC2785-HFE			
		< RESISTOR >			
R1	1-247-838-00	CARBON	2K	5%	1/4W
R2	1-247-838-00	CARBON	2K	5%	1/4W
R3	1-249-429-11	CARBON	10K	5%	1/4W
R4	1-249-429-11	CARBON	10K	5%	1/4W
R5	1-249-430-11	CARBON	12K	5%	1/4W
R6	1-249-421-11	CARBON	2.2K	5%	1/4W
R7	1-249-430-11	CARBON	12K	5%	1/4W
R8	1-249-421-11	CARBON	2.2K	5%	1/4W
R9	1-249-406-11	CARBON	120	5%	1/4W
R10	1-249-406-11	CARBON	120	5%	1/4W
R11	1-249-426-11	CARBON	5.6K	5%	1/4W
R12	1-249-429-11	CARBON	10K	5%	1/4W
R13	1-249-385-11	CARBON	2.2	5%	1/6W
R14	1-249-423-11	CARBON	3.3K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R15	1-249-412-11	CARBON	390	5%	1/4W
R16	1-247-868-11	CARBON	36K	5%	1/4W
R17	1-249-424-11	CARBON	3.9K	5%	1/4W
		< VARIABLE RESISTOR >			
RV1	1-223-764-11	RES, VAR, CARBON 10K(BASS)			
RV2	1-223-764-11	RES, VAR, CARBON 10K(VOLUME)			
		< SWITCH >			
S1	1-762-178-11	SWITCH, PUSH(1KEY)(POWER)			
		MISCELLANEOUS			
9	1-559-892-11	CORD (WITH PLUG) (INPUT)			
16	1-769-080-11	CORD (WITH PLUG) (R OUT)			
SP1	1-504-588-11	SPEAKER (L-CH)			
SP2	1-504-588-11	SPEAKER (R-CH)			
		ACCESSORIES & PACKING MATERIALS			
⚠	1-465-817-31	ADAPTOR, AC (AC-96NES)(AEP)			
⚠	1-467-731-21	ADAPTOR, AC(UK)			
⚠	1-467-852-11	ADAPTOR, AC(Australian)			
⚠	1-569-008-11	ADAPTER, CONVERSION 2P(E)			
⚠	1-693-007-21	ADAPTOR, AC (AC-S195)(E)			
⚠	1-693-029-11	ADAPTOR, AC (AC-96NB)(US, Canadian)			
	3-759-276-11	MANUAL, INSTRUCTION (ENGLISH/FRENCH/GERMAN/SPANISH/DUTCH/ SWEDISH/ITALIAN/PORTUGUESE) (Canadian, AEP, UK, E, Australian)			
	3-759-276-22	MANUAL, INSTRUCTION(ENGLISH)(US)			
*	4-969-608-01	INDIVIDUAL CARTON(US)			
*	4-969-609-01	INDIVIDUAL CARTON (Canadian, AEP, UK, E, Australian)			
*	4-969-611-01	CUSHION			

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